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## Identification of three QTLs with influence on susceptibility to helminth infections in pigs

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of control efforts, has stabilized into a permanent transmission cycle in the Zoo's chimpanzee troop.

#### **16. P. IDENTIFICATION OF THREE QTLs WITH INFLUENCE ON SUSCEPTIBILITY TO HELMINTH INFECTIONS IN PIGS**

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#### **Abstract**

Intestinal helminth infections are causing health and welfare problems in both human and animal populations. A family, in which susceptibility towards *Ascaris* (large round worm) and *Trichuris* (whipworm) infections are segregating, was constructed. Our data demonstrate that genetic components are responsible for approximately 45% and 70% of the variation in *Ascaris* and *Trichuris* parasite loads, respectively. A genome scan using the Illumina 7K SNP-chip has been performed in order to locate genomic regions controlling this susceptibility. A total of 194 pigs from 19 full-sib litters have been genotyped and 3955 informative SNPs were used to perform genotype association analysis. For *Trichuris* parasite load (faecal egg excretion) four SNPs in a 2 Mb region on SSC13 and 4 SNPs in a 7 Mb region on SSC11 have been identified, whereas 7 SNPs located within a 6 Mb region on SSC4 were associated with *Ascaris* egg excretion and worm load. The proportion of phenotypic variance accounted for by a SNP's genotype ranged from 0.08-0.14 and 0.06-0.12 for *Ascaris* and *Trichuris*, respectively. The identified QTLs will be verified in unrelated pig material and we are currently collecting samples for that purpose. Re-sequencing technology will be applied in candidate regions on pigs with deviating phenotypes, which will provide information on all genetic differences in the genomic regions.

#### **17. O. EFFICACY OF SINGLE AND DOUBLE DOSES OF ALBENDAZOLE AND MEBENDAZOLE ALONE AND IN COMBINATION IN THE TREATMENT OF *TRICHURIS TRICHIURA* INFECTION IN SCHOOL AGED CHILDREN IN UGANDA.**

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